

09/820,519

MS91212.01/MSFTP291US

**REMARKS**

Claims 1, 3-40 and 42-45 are currently pending in the subject application and are presently under consideration. Claims 1, 7, 15, 16, 17, 22, 32, 35, 39, 40, and 45 have been amended herein. Applicant's representative thanks the Examiner for courtesies extended during telephone conferences of December 21, 2005, wherein differences between the subject application and the cited references were noted.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

**I. Rejection of Claims 1, 3-14, 17-38 and 42-45 Under 35 U.S.C. §101**

Claims 1, 3-14, 17-38 and 42-45 stand rejected under 35 U.S.C. §101, as being directed to non-statutory subject matter. The subject claims are amended herein to recite computer implemented system/methodology of downloading resource(s), and thus produce useful, concrete and tangible results. Withdrawal of this rejection is respectfully requested.

**II. Rejection of Claims 1, 3, 5-8, 10, 15-19 and 21 Under 35 U.S.C. §102(b)**

Claims 1, 3, 5-8, 10, 15-19 and 21 stand rejected under 35 U.S.C. §102(b) as being anticipated by Robinson (US Patent 5,918,014). Withdrawal of this rejection is respectfully requested for at least the following reasons. Robinson does not teach or suggest applicant's claimed invention.

For a prior art reference to anticipate, 35 U.S.C. §102 requires that "each and every element as set forth in the claim is found, either expressly or inherently, in a single prior art reference. In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999) (quoting *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2USPQ2d 1051, 1053 (Fed. Cir. 1987)).

Applicant's claimed invention is directed to methods and systems of downloading /distributing resources (*e.g.*, software components) among intermediate storage facilities and/or receivers, wherein a usage of the resources to be downloaded can be probabilistically determined and a *request-to receive time* that is associated with receipt of requested resource from the storage facilities are *minimized*. For example, in a context of distributing software components

09/820,519

MS91212.01/MSFTP291US

across multiple storage facilities, the minimizing can be in form of moving resources in between slow and fast storage facilities, and can be inversely proportional to a size of the resource.

Moreover, applicant's invention as recited in the subject claims further evaluates/determines a cost of accessing/returning to the resources in an *unloaded condition*. (See page 39, lines 20-22, page 50 lines 15-20 of the subject specification.) For example, the probability of having to go back to a CD-ROM resource during a life cycle of a product can be evaluated/determined, and an associated cost employed to make decisions regarding a download. Also, the claimed invention further enables changing a *constraint associated with the intermediate storage* facility, based on an associated change in value and cost. For example, a read access time or capacity of such intermediate storage facility can be changed, based on an associated variance in value and cost. As such, an intelligent installment/distribution of resources can be provided, which conserves storage resources.

Such aspects of applicant's claimed invention are not taught or suggested by Robinson. Robinson is directed to showing different ads to different people who are simultaneously viewing the same content. Robinson tracks activities of a subject in an interactive medium to determine which advertisement to present to the user. Robinson does not teach or suggest minimizing *request-to receive time*, and/or evaluating a cost of *returning to resources in unloaded condition*, and/or *changing a constraint* associated with the intermediate storage facility, as in applicant's claimed invention.

Independent claim 1 recites "distributing [...] to minimize total request-to-receive time, and evaluating a cost of accessing resources in unloaded condition". Likewise, independent claim 15 recites "means for optimizing distribution over intermediate storage facilities to minimize total request-to-receive times, and means for evaluating a cost to retrieve resources in a non-downloaded condition." Also, the limitations of "changing a storage capacity of the intermediate storage", and "determining a cost of accessing a resource in an unloaded condition" are recited in independent claims 16 and 17.

In view of the at least above comments it is readily apparent that Robinson does not teach or suggest the subject invention as recited in independent claim 1 (and claim 3, 5-8, 11, 13, 14 dependent therefrom), independent claim 15, independent claim 16, and independent claim 17 (and claims 18-20) dependent therefrom. Withdrawal of this rejection is respectfully requested.

09/820,519

MS91212.01/MSFTP291US

**III. Rejection of Claim 4 Under 35 U.S.C. §103(a)**

Claim 4 stands rejected under 35 U.S.C. §103(a) as being obvious over Robinson. Claim 4 depends from independent claim 1, and as explained *supra* Robinson does not teach or suggest the invention recited in independent claim 1. Withdrawal of this rejection is respectfully requested.

**IV. Rejection of Claims 9, 11, 12 and 20 Under 35 U.S.C. §103(a)**

Claims 9, 11, 12 and 20 stand rejected under 35 U.S.C. §103(a) as being obvious over Robinson in view of Drewry *et al.* (US Patent 5,925,100). Claims 9, 11, 12 depend from independent claim 1, and claim 20 depends from independent claim 17. As explained *supra*, Robinson does not teach or suggest applicant's invention as recited in the subject independent claims, and Drewry *et al.* fails up to make for the aforementioned deficiencies of Robinson with respect to the subject independent claims. Withdrawal of this rejection is respectfully requested.

**V. Rejection of Claims 13 and 14 Under 35 U.S.C. §103(a)**

Claims 13 and 14 stand rejected under 35 U.S.C. §103(a) as being obvious over Robinson and Drewry *et al.* (US Patent 5,925,100) in view of Cherkasova *et al.* (US Patent 6,425,057). Claims 13, 14 depend from independent claim 1, and Drewry *et al.* in view of Cherkasova *et al.* fail to make up for the aforementioned deficiencies of Robinson with respect to independent claim 1. Withdrawal of this rejection is respectfully requested.

**VI. Rejection of Claims 22-40 and 42-45 Under 35 U.S.C. §103(a)**

Claims 22-40 and 42-45 stand rejected under 35 U.S.C. §103(a) as being obvious over Robinson and Drewry *et al.* in view of Cherkasova *et al.*, and further in view of Fischer *et al.* (US Patent 6,438,672). Withdrawal of this rejection is respectfully requested for at least the following reasons.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable

09/820,519

MS91212.01/MSFTP291US

expectation of success. Finally, *the prior art reference (or references when combined) must teach or suggest all the claim limitations*. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art and not based on the Applicant's disclosure. *See In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The claimed invention is directed to methods and systems of downloading /distributing resources (e.g., software components) among intermediate storage facilities and/or receivers, wherein *total requested time* to request and receive resources are *minimized*, and wherein *a constraint* (e.g., *a storage space*) associated with the intermediate storage facility can be changed. The claimed invention also employs a *knapsack approximation* to approximate various costs and values.

Independent claim 22 recites "minimizing total expected *requested to receive time* and *changing a storage space* [...], based on the minimizing act." Also, independent claim 32 recites a "*value density* of a *knapsack approximation* procedure" (e.g., as defined on page 67 of the subject specification.) Likewise, independent claim 40 recites "determining a *cost of returning to resources* in an unloaded condition." Such aspects of applicant's claimed invention are not taught or suggested by the combination of references as indicated in the Office Action.

Cherkasova *et al.* in column 3 lines 13-23, as cited in the Office Action, relates to reducing an *average* latency, for removing/replacing an object from cache – such is not the same as minimizing the *total* requested time as in applicant's claimed invention. Moreover, Drewry *et al.* fails to makeup for the aforementioned deficiencies of Cherkasova *et al.* with respect to independent claim 22. Drewry *et al.* employs a least-recently used (LRU) scheme to page or swap out data from memory, and not a *total* request time. Moreover, it is readily apparent that the claimed subject matter of "a *cost of returning to resources* in an unloaded condition", and "*value density* of a *knapsack approximation*" is not taught or suggested by the cited references, alone or in combination.

In view of the at least above comments, the combination of Robinson and Drewry *et al.* in view of Cherkasova *et al.*, and further in view of Fischer *et al.*, does not teach or suggest the subject invention as recited in independent claim 22 (and claims 23-31 dependent therefrom), independent claim 32 (and claims 33-38 dependent therefrom), independent claim 39, and

09/820,519

MS91212.01/MSFTP291US

independent claim 40 (and claims 42-45 dependent therefrom). Thus, this rejection should be withdrawn.

#### CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP291US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number below.

Respectfully submitted,

AMIN & TUROCY, LLP



Himanshu S. Amin  
Reg. No. 40,894

AMIN & TUROCY, LLP  
24<sup>TH</sup> Floor, National City Center  
1900 E. 9<sup>TH</sup> Street  
Cleveland, Ohio 44114  
Telephone (216) 696-8730  
Facsimile (216) 696-8731